STEPHEN MITCHELL

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EDUCATION

Bachelor of Science: Computer Science & Engineering Graduation: May 2022
James Madison University. GPA: 3.91

EXPERIENCE

ATPCO Sterling, VA
Java Software Engineer Intern May 2021 - Present

- Worked on an agile team of software engineers to produce new features for the airline pricing tool Architect
- Modified Spring Boot backend microservices to fulfill customer requests, tracked in Jira
- Participated in daily scrum standup meetings to discuss sprint progress and blockers
- Collaborated with coworkers using git version control following best-practice source code management
- Utilized Jenkins pipelines to deploy changes to development environments for testing

Northrop Grumman Mission Systems Baltimore, MD
Systems Engineer Intern Jun 2020 - Aug 2020

- Developed a SysML model for a radar system product line in Cameo Systems Modeler
- Applied principles of model based systems engineering to translate design requirements into a system model
- Designed and presented a process for modeling product line variations to engineering teams
- Rated as a top performing intern by managers and project team

James Madison University Harrisonburg, VA
Research Assistant in the Wearable Computing Research Group Sep 2018 - Present

- Developed algorithm to automatically measure athlete performance from accelerometer data
- Co-wrote conference paper on measuring athletic performance using wearable sensors and presented findings at the 2021 IEEE SIEDS conference. Found here: www.jasonforsyth.net/publication/sieds2021/

PROGRAMMING LANGUAGES

Java	Building and testing microservices in Spring Boot 2; Creating GUIs in JavaFX/Java Swing; Completing large projects for CS coursework
Python	Building RESTful APIs in Django; Data analysis using NumPy, pandas, and Matplotlib; GUIs in tkinter and PyQt
JavaScript	Frontend development in ReactJS; RESTful API consumption for dynamic webpages

RELEVANT COURSES

Computer Science:	Software Engineering, Programming Languages, Cryptography, Algorithms and Data Structures, Computer Systems
Engineering:	Calculus I - III, Linear Algebra and Differential Equations, Thermodynamics, Fluid Mechanics, Statics and Dynamics

PROJECTS

Aerial Multispectral Imaging Capstone Project Aug 2020 - Present
Using a drone-attached multispectral camera and a ground-based sensor mesh network to apply precision agriculture to a vineyard in Albemarle, Virginia. Wrote a REST API in Django for handling user data and authentication. Connected REST API to ReactJS frontend to allow vineyard manager to view data collected on property. Used git version control for source code management and Docker to create easily-deployable containers of frontend and backend services. On GitHub at: mitchellss/skyprecision_api & mitchellss/skyprecision_client

Recipe Rest Personal Project May 2021 - Present
Solving the problem of inconsistent online recipe formatting by presenting recipes in a mobile-friendly way that is optimized for use in the kitchen (easily accessible ingredients list, metric weight for ingredients, built in timers, etc). Building and connecting Java Spring Boot 2 microservices to an Angular frontend and a PostgreSQL database. Currently a work in progress. On GitHub at: mitchellss/recipe_rest

EXTRACURRICULARS

Unix Users Group - Learned advanced tools and internal workings of Unix-based operating systems
Club Archery - Represented James Madison University at collegiate archery competitions